

Amendments to the Specification:

The paragraph on page 14, line 7, has been amended as follows:

--It has been discovered that the methods of manufacturing ophthalmic lenses in accordance with the present invention are particularly advantageous with lenses made from [[a]] hydrophilic lens materials, including, but not limited to, hydrophilic silicone polymer components and the like, and mixtures thereof.--

The paragraph on page 19, line 4, has been amended as follows:

--For example, turning now to Figs 2a-2c, a rotationally symmetric, single vision contact lens 30 is shown, to represent one of the [[most]] simplest contact lens designs.--

The paragraph on page 19, line 17, has been amended as follows:

--Lens design using the present invention more specifically comprises the following steps. A corneal shape of a patient is first determined. A selected number of sample data points representing the cornea are provided using conventional means. A desired fitting relationship of the lens back surface to the cornea is then specified to meet the wearer's physiological, physical and/or optical requirements. A simulated three dimensional surface is then defined using an algorithm to interpolate between the data points. This simulated three dimensional surface can be formed on a tooling insert, or directly onto a lens posterior surface, for example by using [[a]] computer driven surface cutting tools, mills or lathes.--

interpolate between the data points. This simulated three dimensional surface can be formed on a tooling insert, or directly onto a lens posterior surface, for example by using [[a]] computer driven surface cutting tools, mills or lathes.--

The paragraph beginning on page 28, line 12, has been amended as follows:

--In another embodiment of the invention, a method for reshaping the cornea of an eye is provided. The method generally comprises selecting or designating sample data points representing a corrected corneal surface of an eye of a patient, e.g., human being, and interpolating, using at least one algorithm, between the sample data points, to produce a substantially smooth, continuous, three dimensional surface. Preferably, sample data points from a three dimensional surface of the uncorrected surface of the patient's cornea are obtained and are interpolated between using at least one algorithm to produce a smooth, substantially junctionless simulated three dimensional uncorrected surface. Using a conventional computer driven laser system supplied with the simulated surface contour, and preferably the simulated uncorrected surface contour, the cornea is reshaped to approximate the simulated surface contour. In this embodiment of the invention, the method can be used with conventional corneal refractive laser surgical systems to alter the refractive capabilities of the eye by selectively ablating or reshaping the corneal stromal tissue, and in some cases,

following temporary removal of an anterior corneal flap. The method is useful in producing an asymmetric surface[[.]], such as a corneal surface, for example, to correct astigmatism, in providing custom corneal shaping for improved optical correction, in providing a correction centered over the corneal apex which is often not aligned with the pupil center and the like.--